

# HUMAN IMMUNODEFICIENCY VIRUS (HIV) – MYCOBACTERIUM TUBERCULOSIS (TB) CO-INFECTION IN SRI LANKA

D P C K A Lal  
National Hospital of Sri Lanka

## BACKGROUND

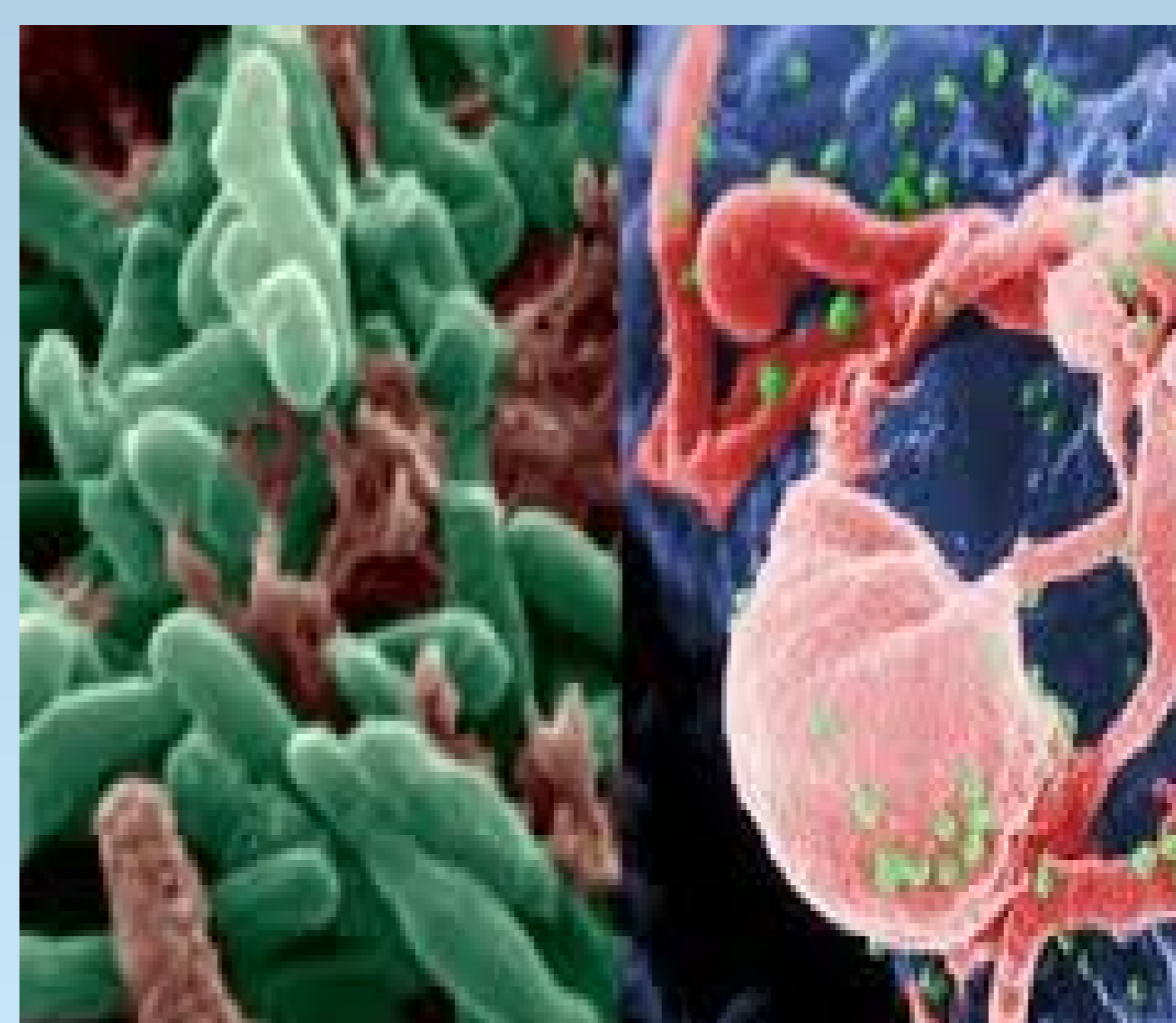
TB and HIV co-infection is considered to occur worldwide. In 2013 of the estimated 9 million people who developed TB an estimated 1.1 million (13%) were HIV positive. There were also in 2013 360,000 deaths from HIV associated TB equivalent to 25% of all TB deaths, and around 25% of the estimated 1.5 million deaths from HIV/AIDS.

Immunosuppression by HIV makes patients vulnerable to be infected with TB and they are more prone to get severe disease. Both TB and HIV have profound effects on the immune system, as they are capable of disarming the host's immune responses through mechanisms that are not fully understood. HIV coinfection is the most powerful known risk factor for progression of Mycobacterium tuberculosis infection to active disease, increasing the risk of latent TB reactivation 20-fold.

Prevalence of TB and HIV in Sri Lanka is 4.2% and < 0.1% respectively. Relationship between HIV and TB is not yet clearly defined in Sri Lanka. The objective of this preliminary study is to describe the epidemiology of HIV – TB co-infection in Sri Lanka.

## RESULTS

Patients were 17 to 54 years of age. Male: Female = 33:21. 38 and 16 patients had pulmonary and extrapulmonary TB respectively. Only 02 male patients had positive ELISA test for HIV but both were negative for western blot test.



## CONCLUSIONS

HIV – TB co-infection is not a significant occurrence in Sri Lanka yet. There for HIV should not be considered as an important predisposing factor for TB in Sri Lanka and It is not rational to screen all TB patients for HIV as it is not cost effective for a resource poor country.

## REFERENCES

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**How can your organization help prevent HIV-related TB in your clients?**

Collaborate with your state or local health department's TB control program to:

- Educate your staff and clients about TB
- Educate your staff and clients about testing for TB
- Educate your staff about the proper treatment of persons coinfected with TB and HIV

Other ways your organization may be able to help:

- Provide TB testing for your high-risk clients
- Assist in the delivery of DOT for latent TB infection

**CDC Publications about TB for your health care providers:**

CDC publications about TB can be viewed and ordered at no cost by visiting the CDC Division of Tuberculosis Elimination Website at [www.cdc.gov/tb](http://www.cdc.gov/tb).

**Interactive Core Curriculum on Tuberculosis Web-based Course.** [www.cdc.gov/tb/webcourse/corecur/index.htm](http://www.cdc.gov/tb/webcourse/corecur/index.htm)

**Managing Drug Interactions in the Treatment of HIV-Related Tuberculosis.** This document presents current data pertaining to interactions between the rifamycin antibiotics and antiretroviral drugs. [www.cdc.gov/tb/HIV\\_Drugs/default.htm](http://www.cdc.gov/tb/HIV_Drugs/default.htm)

**CDC Publications about TB for your clients:**

Take Steps to Control TB When You Have HIV [www.cdc.gov/tbpubs/pamphlets/TB&HIV\\_EN.pdf](http://www.cdc.gov/tbpubs/pamphlets/TB&HIV_EN.pdf)

Get the Facts About TB Disease [www.cdc.gov/tbpubs/pamphlets/TB\\_disease\\_EN\\_rev.pdf](http://www.cdc.gov/tbpubs/pamphlets/TB_disease_EN_rev.pdf)

Questions and Answers About TB [www.cdc.gov/tbfaq/default.htm](http://www.cdc.gov/tbfaq/default.htm)

**For more information, the following resources are also available:**

**TB Education and Training Resources Website**  
Use this site to search for TB education and training materials, find out how to order TB materials, and locate funding opportunities. [www.tbtreasures.org](http://www.tbtreasures.org)

**TB-Related News and Journal Items Weekly Update**  
This weekly e-mail update is a compilation of TB-related articles published for the benefit and information of people interested in TB. [www.cdc.gov/od/odet/tbupdate.asp](http://www.cdc.gov/od/odet/tbupdate.asp)

**The TB Education and Training Network (TB ETN)**  
TB ETN brings TB professionals together to network, share resources, and build education and training skills. [www.cdc.gov/tb/ETN/](http://www.cdc.gov/tb/ETN/)

**The CDC Regional Training and Medical Consultation Centers (RTMCCs)**  
The RTMCCs provide training, educational resources, and medical consultation to TB programs and medical providers in the US. [www.cdc.gov/tb/rtmcc/](http://www.cdc.gov/tb/rtmcc/)

**Contact your state or local health department.**

**What Can HIV/AIDS Service Organizations Do to Help?**

- Collaborate with your local health department's tuberculosis (TB) control program
- Educate your staff and clients about TB
- Educate your staff and clients about the importance of TB testing in the prevention of TB

**HIV-Related TB Can Be Prevented and Treated – and You Can Help!**

## METHODS

54 sexually active patients with histopathologically or microbiologically proven Tuberculosis were screened for HIV with ELISA antibody test. Positive ELISA was confirmed by western blot test.

No conflicts of interests to declare